

Date: Tuesday, 07/04/2009 10:18:14 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SADDLE FITTING, FWD (OUTBOARD/INBOARD)		
Job Number :	46952	Part Number :	D2571		
Estimate Number :	10530	Drawing Number :	D2571 REV E		
P.O. Number :		Project Number :	N/A		
This Issue :	07/04/2009	S.O. No. :			
Prsht Rev. :	NC	Drawing Revision :	E		
First Issue :	1/1	Type :	MACHINED PARTS		
Previous Run :	46432	Material :			
Written By :		Due Date :	24/04/2009	Qty:	10 Um: Each
Checked & Approved By :	<u>Julie Dawson</u>				
Comment :	Est: 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572KJ				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101007	Saddle Billet
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)
 7075-T7351 8.25X7.75X2.5
 Make from D6101-007 billet for D2571
 Ensure that grain is along 7.75" length
 Batch No: 46412

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
 Program Batch No. 46952 Double check by: mne

- 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
- 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
- 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
- 4-Deburr and remove all machining marks
- 5-Tumble to remove sharp edges.

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE
 Machine keyway as per dwg D2571 & D2572

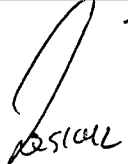

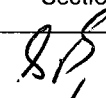
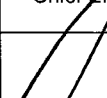
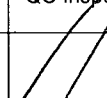
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2571 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 09/04/20
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>46952</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/04/11	2.0	Machine bug and chamber tool went to low 2-c: Unexplained Machine Malfunction.		Scraped no replace. Qty 1 	mmf 09/04/11	 09/04/14		

NOTE: Date & initial all entries

Date: Tuesday, 07/04/2009 10:18:14 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 46952

Part Number: D2571

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SP 09/04/14 (9)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

HL 09-04-14 (X9)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M110 939

START TIME:

9:30

OVEN TEMPERATURE:

320°

FINISH TIME:

10:00

BL 09-04-15 (9)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

HL 09-04-15 (9)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

5433

A 09-04-15

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/04/17 JA MF 09-04-16

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 46952
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443			.440	.439	.438		
B	1.745	1.755			1.750	1.750	1.748		
C	3.495	3.505			3.500	3.500	3.500		
D	1.745	1.755			1.750	1.750	1.748		
E	7.990	8.010			8.004	8.002	8.002		
F	0.490	0.510			.501	.501	.503		
G	0.257	0.262			.260	.258	.260		
H	0.375	0.380			.377	.377	.377		
I	0.490	0.510			.503	.503	.503		
J	1.174	1.184			1.175	1.175	1.180		
K	0.558	0.578			.570	.570	.570		
L	1.174	1.184			1.175	1.175	1.180		
M	1.490	1.500			1.497	1.493	1.496		
N	2.495	2.505			2.497	2.496	2.499		
O	3.869	3.879			3.872	3.871	3.874		
P	0.115	0.135			.123	.124	.126		
Q	0.115	0.135			.135	.135	.129		
R	0.240	0.260			.251	.251	.251		
S	0.115	0.135			.132	.131	.131		
T	0.178	0.198			.188	.188	.188		
U	2.940	2.980			2.958	2.955	2.957		
V	0.230	0.250			.240	.242	.239		
W	0.115	0.135			.130	.131	.123		
X	0.308	0.313			.310	.311	.311		
Y	0.760	0.765			.760	.760	.760		
Z	0.352	0.372			.368	.366	.364		
AA	0.470	0.530			.500	.500	.501		
AB	0.615	0.635			.625	.621	.623		
AC	0.053	0.073			.063	.063	.063		
AD	0.240	0.260			.250	.250	.250		
AE	1.375	1.395			1.391	1.390	1.392	1.387	
AF	0.115	0.135			.125	.130	.129		
AG	0.240	0.280			.265	.270	.264		
AH	0.240	0.260			.244	.246	.246		
AI	2.000	2.020			2.006	2.005	2.000	2.005	
AJ	0.023	0.043			.033	.033	.033		
Accept/Reject									

Measured by: <u>mmf</u>
Date: <u>09/04/12</u>

Audited by: <u>SP</u>
Date: <u>09/04/14</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 48952	
Description: Saddle, Fwd Outboard		Part Number: D2571	
Inspection Dwg: D2571 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1 5	2 6	3 7	4 8 ^x		
A	0.438	0.443		.439	.438	.440	.440		
B	1.745	1.755		1.746	1.747	1.750	1.750		
C	3.495	3.505		3.497	3.498	3.500	3.500		
D	1.745	1.755		1.747	1.747	1.750	1.750		
E	7.990	8.010		8.005	8.004	8.001	8.000		
F	0.490	0.510		.502	.510	.508	.500		
G	0.257	0.262		.258	.258	.259	.259		
H	0.375	0.380		.377	.377	.376	.376		
I	0.490	0.510		.503	.503	.504	.503		
J	1.174	1.184		1.177	1.178	1.179	1.179		
K	0.558	0.578		.570	.571	.570	.570		
L	1.174	1.184		1.177	1.177	1.179	1.179		
M	1.490	1.500		1.494	1.494	1.495	1.495		
N	2.495	2.505		2.502	2.502	2.500	2.500		
O	3.869	3.879		3.872	3.872	3.874	3.874		
P	0.115	0.135		.124	.125	.123	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.131	.129	.126	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.956	2.954	2.959	2.960		
V	0.230	0.250		.239	.238	.241	.242		
W	0.115	0.135		.128	.130	.124	.124		
X	0.308	0.313		.310	.311	.311	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.363	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.624	.626	.624	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.246	.245		
AE	1.375	1.395		1.387	1.390	1.391	1.389		
AF	0.115	0.135		.129	.130	.135	.135		
AG	0.240	0.280		.277	.272	.260	.260		
AH	0.240	0.260		.244	.245	.246	.246		
AI	2.000	2.020		2.005	2.005	2.006	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	J.L.
Date:	09/04/14

Audited by:	SP
Date:	09/04/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 110952
Description: Saddle, Fwd Outboard		Part Number: D2571
Inspection Dwg: D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	9	10	3	4		
A	0.438	0.443		.440	.440				
B	1.745	1.755		1.750	1.750				
C	3.495	3.505		3.500	3.500				
D	1.745	1.755		1.750	1.750				
E	7.990	8.010		8.000	8.001				
F	0.490	0.510		.504	.506				
G	0.257	0.262		.259	.259				
H	0.375	0.380		.376	.376				
I	0.490	0.510		.503	.504				
J	1.174	1.184		1.179	1.179				
K	0.558	0.578		.571	.570				
L	1.174	1.184		1.179	1.179				
M	1.490	1.500		1.495	1.495				
N	2.495	2.505		2.500	2.500				
O	3.869	3.879		3.874	3.874				
P	0.115	0.135		.123	.124				
Q	0.115	0.135		.135	.135				
R	0.240	0.260		.250	.250				
S	0.115	0.135		.129	.130				
T	0.178	0.198		.188	.188				
U	2.940	2.980		2.960	2.960				
V	0.230	0.250		.242	.244				
W	0.115	0.135		.126	.125				
X	0.308	0.313		.310	.310				
Y	0.760	0.765		.760	.760				
Z	0.352	0.372		.366	.368				
AA	0.470	0.530		.500	.500				
AB	0.615	0.635		.624	.625				
AC	0.053	0.073		.063	.063				
AD	0.240	0.260		.245	.248				
AE	1.375	1.395		1.390	1.388				
AF	0.115	0.135		.135	.135				
AG	0.240	0.280		.260	.260				
AH	0.240	0.260		.246	.251				
AI	2.000	2.020		2.002	2.000				
AJ	0.023	0.043		.033	.033				
Accept/Reject									

Measured by: J.L.
Date: 09/04/14

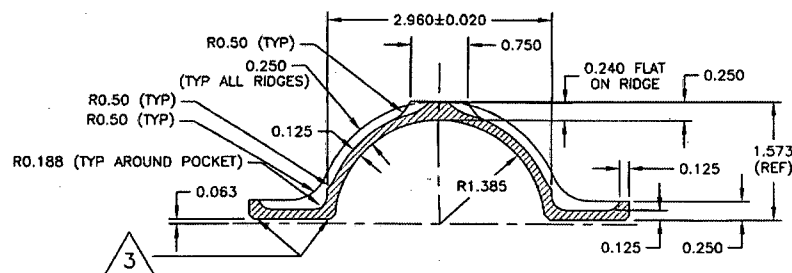
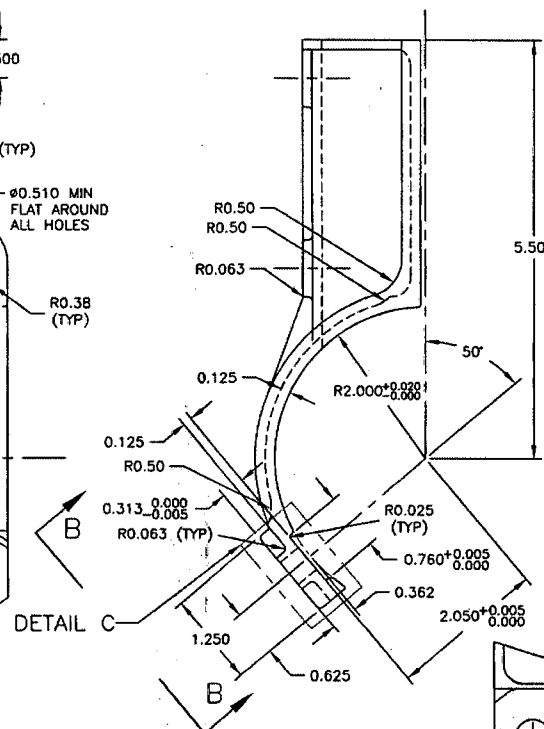
Audited by: [Signature]
Date: 09/04/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	[Signature]

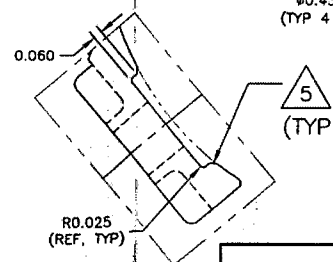
05.12.06

MATERIAL: 7075-17351 (QQ-A-250/12) (REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART
QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

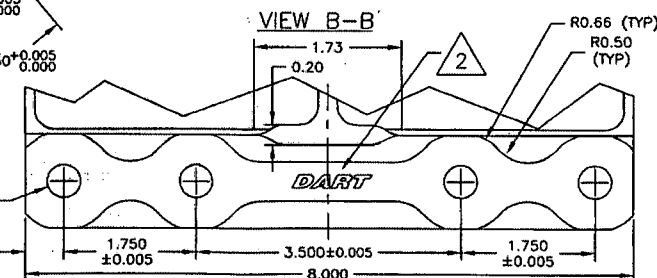
- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DRUG LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)

 $\triangle E$ 

SECTION A-A



DETAIL C
SCALE 4:3



E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DRAWN BY		DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA
DS	PH		
CHECKED 	APPROVED 	DRAWING NO. D2571	REV.
			SHEET 1 OF
DATE 05.07.13	TITLE OUTER FWD SADDLE		SCALE 2:

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WORK ORDER NO. 46952